



THE REALLY BIG THREATS I.

"One death is a tragedy, ten deaths is a disaster, ten thousand deaths is merely a statistic."

Joseph Stalin

- What 'Stalin statistics'-level threats should Americans currently worry about – if any?
 - Every major crime engenders terror at some level
 - Distinguish between deca-death "police work" and >kilo-death "acts of the common enemy" that <u>aren't</u> conventional warfare
 - Features of stealth, shock, non-repetitiveness
 - Problems *far* worse than the "9/11" type
 - Mega-death scales, not kilo-death ones
 - <u>Trillions</u> of dollars of economic impact, not billions
 - Staggering blows to American civilization
 - E.g., like Al Qaeda repeatedly threatens to deliver



THE REALLY BIG THREATS II.

- Three distinct flavors
 - Wholesale physical destruction
 - Means: Explosives; stored U.S. mass/energy used
 - <u>Presentation</u>: Blunt-object trauma; lacerations; burns; exposure; opportunistic disease
 - Infectious, high-lethality disease
 - Means: Aerosol initiation; coughing/sneezing
 - <u>Presentation</u>: Abrupt, super-high incidence of 'exotic' disease; high morbidity/mortality; only 'weak' treatments available
 - Critical infrastructure destruction
 - Means: Various
 - <u>Presentation</u>: {Lights out, natural gas & water don't flow from taps; grocery stores empty; banks closed; bridges gone; rivers flood; ...TV and Internet down}: exposure, malnutrition, despair,...



THE REALLY BIG THREATS III.

• Where do they come from?

- Terrorist cells with 0.3 2 dozen people
 - Now unusually difficult to penetrate—high ideological and cultural 'shields'
- Per-attack resource envelopes of \$1 M
- Typical effort-durations of 3 years
- Featuring:
 - Perceptive analyses of vulnerabilities, chinks in-armor, (transient) strike-opportunities
 - Potent leveraging of available-in-the-U.S. assets
 - E.g., big, easily-accessed stored energy pools; readily purchased/commandeered assets; entry-visas; wall-to-wall civil liberties;...

 - Intelligent, often-meticulous planning

 Including extensive, realistic rehearsals-&-drills
 - Adequate material resources
 - But not so much as to encourage stupidity, waste
 Mostly wire-transferred in from abroad
 Some key personnel willing to die
 "Exceptionally-intelligent robots/autopilots"



THE REALLY BIG THREATS IV.

- What do you do about them?
 - No 'magic' solutions
 - This isn't an easy problem
 - Present-day transnational terrorism is an <u>engineered pathogen</u> directed against the vital organs of modern civilization
 - Intelligently designed <u>to destroy Western</u> <u>civil societies</u>...
 - "Read his lips!" This is what OBL & Co. have said, repeatedly, plainly, unabashedly, unmistakably yea, proudly-&-defiantly
 - ...by the failed-albeit-intelligent 'students' of what it takes to have a modern culture and to live in a Third Millennium society
 - The radical-fundamentalist, modern-rejectionist,
 <u>medieval</u> Islamists, bent on "restoring the Caliphate from Morocco to Indonesia"



THE REALLY BIG THREATS V.

- What do you do about them?cont'd.
 - <u>Maximum</u> pressure applied at <u>every</u> accessible point of the 'infection'
 - Close down the "wellsprings of lethal hatred," wherever they may be found
 - -Radical madrassas uniformly shuttered
 - Religiously-disguised child abuse
 - No more corruption-&-intellectual crippling of the defenseless young!
 - -Hatemongering clerics ousted by mosques
 - Key 'hate speech' banned by local law
 - E.g., overt incitement to murder anyone
 - Terrorism-oriented encampments closed, swiftly and definitively everywhere
 - "If you think peace is expensive, try throwing a war sometime." H. Kissinger



THE REALLY BIG THREATS V.

- What do you do about them? cont'd.
 - <u>Maximum</u> pressure applied at <u>every</u> accessible point of the 'infection' cont'd.
 - Kick out/keep out the pathogenic Bad Actors
 - No non-citizen has a *right* to be here
 - Only <u>model citizens</u> of their own countries should get entry visas the *presumption* of good intentions must be suspended, forthwith
 - Establish clear 'rules of the road' for non-citizens,
 over-&-above the criminal code, & enforce them
 - "If you step over the 'bright lines,' out you go immediately & you don't ever come back!"
 - Modern technology, intelligently applied, can do a far better job than has been or is being done
 - Citizen-voters <u>must</u> demand excellence from the government on this entire score
 - Thus far, it's "Keystone Kops" performance



THE REALLY BIG THREATS VI.

- What do you do about them? cont'd.
 - <u>Maximum</u> pressure applied at <u>every</u> accessible point of the 'infection' cont'd.
 - Suppress pathogenic behaviors
 - Raise (non-obvious) 'shields' at vulnerable assets
 - Deny all 'cheap shot' opportunities
 - Emplace fields-of-tripwires at prized capabilities
 - Multiple, layered, 'invisible' hazards posed to Bad Guys
 - Enforce "Loose lips sink ships!" discipline, so that each-&-every defensive means is exercise-durable
 - <u>Compellingly</u> incentivize turn-around behaviors by potentially-reformable Bad Guys
 - "Your <u>and</u> your family's lives will be <u>utterly</u> <u>transformed</u> forever by your moral decision."
 - By *fully* leveraging our enormous economic, technological and cultural strengths
 - *Not* by Soviet-style Government "Five-Year Plans"



THE REALLY BIG THREATS VII.

- What do you do about them?cont'd.
 - <u>Maximum</u> pressure applied at <u>every</u> accessible point of the 'infection' cont'd.
 - Deny success to the pathogenic attacks
 - Minimize losses sustained during any-&-all attacks
 - Intelligence-&-imagination in preparation
 - The enormous, traditional advantages of the defense
 - Discipline-&-steadfastness in execution
 - The everlasting key to success-in-war
 - Attribute-&-retaliate <u>disproportionately</u>
 - "You say you-&-yours love death the way we love life? Wow, do we have a deal for you!"
 - Pursuit of the guilty is intense, lavishly resourced, knows no geo-bounds – and goes on forever



THE REALLY BIG THREATS VIII.

- What do you do about them? cont'd.
 - Mass physical destruction
 - <u>Future</u> Government 'trip-wires' must reliably spot weaponry-in-transit toward targets
 - Government weaponry-negation ways-&-means need lots of improvement, also
 - None of this <u>isn't</u> Buck Rogers stuff but it <u>is</u> high-tech, and it does demand competence
 - Citizenry should demand emplacement, <u>'live fire' testing, independent review</u> & periodic upgrading of <u>all</u> civil-defensive systems
 - If you don't <u>see</u> it happening, and people you trust don't <u>tell</u> you it's happening, be assured that it <u>really isn't</u> happening
 - There's <u>no</u> practical limit to the time-&-money that can be expended by large bureaucracies without <u>any</u> worthwhile results being obtained



THE REALLY BIG THREATS IX.

- What do you do about them? cont'd.
 - Large-scale biological attacks
 - <u>Future</u> Government trip-wires must detect attacks <u>underway</u>, at earliest-possible times
 - The *only* way to reliably reduce mass-casualties
 - Citizenry should demand emplacement, 'live fire' testing, independent review & periodic upgrading
 - Government must develop-&-stockpile ways-&-means of mass-rescue of <u>attacked</u> citizenry of *already-proven* efficacy
 - Citizenry must demand independent, periodic assessments of adequacy, e.g., timeliness
 - Present-time "smallpox affair" may end up the poster-child for "How <u>not</u> to do bio-defense"
 - Unprecedently dense, mobile population, with many "young, old, sick and hurt" members and essentially all of them "smallpox-naïve"
 - Vaccination-under-attack plays "You bet your country" with an entirely untested scheme and can't rescue most of the already-attacked



THE REALLY BIG THREATS X.

- What do you do about them?cont'd.
 - -Critical infrastructure lossage
 - Government must stockpile key items for swift recovery and lossageminimization; conduct realistic rehearsals for post-attack reconstitution
 - -Citizen-group oversight and citizenry participation is essential otherwise, it's bureaucratics-as-usual
 - Supported by realistic analysis and modeling, to spot-&-assess key vulnerabilities – and prescribe 'fixes'
 - -"Red Teams" everywhere the implacable enemy of the dissembling bureaucrat, as well as watchdog for the interests of the citizenry
 - Civil Defense analog of a Grand Jury



TWO EXAMPLES I.

- Crucial infrastructure attack
 - ElectroMagnetic Pulse (EMP)
 - Generated by nuclear explosions at high altitude (100-1000 km)
 - "If you can see the nuclear burst above your horizon, its EMP can see you-&-yours"
 - Combination of lightning and static electricity, re impacts on electrical-&electronic equipments of all types
 - Single burst disables all of vulnerable equipment, across all of U.S.??
 - Suppress with <u>effective</u> missile defenses keep warheads from entering 'U.S. space'
 - Reconstitute-after-attack with lots of stored spare parts – and people who know how to install them <u>and</u> revive systems



TWO EXAMPLES II.

- ◆ Biological attack (neo-)smallpox
 - Virus-loaded <u>micro</u>drops dispensed from aerosolizing containers: e.g., big airports
 - E.g., ~1 million people infected in 2 weeks' undetected attack at Chicago O'Hare
 - Deep pulmonary infections vs. classic upper respiratory ones "terrorist-type smallpox"
 - Brief acute phase, near-100% mortality?
 Gene-grafted, for swift, 100% lethality?
 - Voluntary mass vaccination-in-advance suppresses rate-of-infections under attack
 - Undergirded by advanced antivirals and VIG
 - Attack-alert by in situ real-time detectors
 - Support swift airport quarantine; interception -&-vaccination of airborne infectees
 - Advanced antiviral rescue of clinical cases
 - Zero deaths; no National hyper-epidemic



TWO EXAMPLES III.

- But we have <u>no</u> ballistic missile defenses
 - In spite of superb leadership and excellent policy actions by President, SecDef – e.g., ABM Treaty-scrapping
 - And the National program has a by-now well-rehearsed "Don't know what, don't know when" theme-song
 - "Hand-me-down" designs/programs/people from folks who didn't like missile defense but which are now fully funded!
 - Amazing slow-roll still going on by Pentagon bureaucracy
- And we have <u>no</u> program for erecting robust defenses against bio-attacks
 - Although billions have been appropriated to this end
 - E.g., \$625 M spent on a crash program to buy 320 M doses of DryVax and the Government <u>still</u> can't figure out *what* to do with it, let alone *when*, *how* or *why*
 - And a smallpox attack on the U.S. can't be <u>detected</u> into the foreseeable future until pocks erupt on victims though the entire world envies American bio-tech
 - And human testing-&-stockpiling of breakthough-quality pan-Orthopoxviridae antivirals is <u>still</u> 'on hold'



THE BOTTOM LINE

- There's <u>no</u> substitute for <u>preparedness</u>
 - Thoughtful preparedness by a nation as rich-&-powerful-&-technically advanced as the U.S. virtually guarantees desirable outcomes
 - Neo-barbarians with 12th Century worldviews are *doomed to lose* each-&-every time they confront us
 - But the lack of it can lead to outcomes of nearly unimaginable wretchedness
 - Pervasive <u>un</u>preparedness well-characterizes our present condition and our near-term outlook relative to several classes of neo-barbarian threats
 - A new Cabinet agency isn't going to fix this <u>at all</u> in-&-of itself: re-arranging the *Titanic's* deck-chairs
 - Lots of sustained effort by thoughtful, dedicated citizens, unshackled by standard bureaucratics, will be necessary – and may be sufficient

I offer you the choice of life or death, blessing or curse. Choose life and then you and your descendents will live. — Deuteronomy 30:19